

Product datasheet

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ARG23695 anti-CD49b / Integrin alpha 2 antibody [AK7]

Package: 100 μg Store at: -20°C

Summary

Product Description Mouse Monoclonal antibody [AK7] recognizes CD49b / Integrin alpha 2.

Clone AK7 recognizes the integrin alpha 2 subunit, a $^{\sim}160$ kDa glycoprotein that non-covalently associates with the $^{\sim}130$ kDa integrin beta 1 subunit to form the VLA-2 complex. CD49b is expressed by platelets, long term cultivated T cells, approximately 50% of monocytes and most adherent cell lines.

Mouse anti Human CD49b antibody, clone AK7 inhibits cell attachment to collagen.

Tested Reactivity Hu, Bb, R. Mk

Tested Application FACS, FuncSt, IHC-Fr

Host Mouse

Clonality Monoclonal

Clone AK7 Isotype IgG1

Target Name CD49b / Integrin alpha 2

Species Human

Conjugation Un-conjugated

Alternate Names Collagen receptor; VLA-2 subunit alpha; HPA-5; CD49B; CD49 antigen-like family member B; GPIa;

VLA-2; CD antigen CD49b; BR; VLAA2; Platelet membrane glycoprotein Ia; Integrin alpha-2

Application Instructions

Application table	Application	Dilution
	FACS	1:50 - 1:100
	FuncSt	Assay-dependent
	IHC-Fr	1:500 - 1:1000
Application Note	IHC-Fr: The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Arigo recommends the use of acetone fixation for frozen sections. FACS: Use 10 μ l of the suggested working dilution to label 10^6 cells in 100 μ l. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide
Preservative	0.09% Sodium azide
Concentration	1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol ITGA2

Gene Full Name integrin, alpha 2 (CD49B, alpha 2 subunit of VLA-2 receptor)

Background This gene encodes the alpha subunit of a transmembrane receptor for collagens and related proteins.

The encoded protein forms a heterodimer with a beta subunit and mediates the adhesion of platelets and other cell types to the extracellular matrix. Loss of the encoded protein is associated with bleeding disorder platelet-type 9. Antibodies against this protein are found in several immune disorders, including neonatal alloimmune thrombocytopenia. This gene is located adjacent to a related alpha subunit gene. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2012]

Function Integrin alpha-2/beta-1 is a receptor for laminin, collagen, collagen C-propeptides, fibronectin and E-

cadherin. It recognizes the proline-hydroxylated sequence G-F-P-G-E-R in collagen. It is responsible for adhesion of platelets and other cells to collagens, modulation of collagen and collagenase gene expression, force generation and organization of newly synthesized extracellular matrix. [UniProt]

Calculated Mw 129 kDa